SEQUENCE LISTING

<110> Hunter, Tony
Kun Ping, Lu

<120> NIMA INTERACTING PROTEINS

<130> 66671-044

<140> US 10/648,631
<141> 2003-08-25

<150> US 10/616,410
<151> 2003-07-08

<160> 22

<170> FastSEQ for Windows Version 4.0

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<212> DNA
<213> Homo sapiens

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tgctggccag cacctcgagg gaag atg gcg gac gag gag aag ctg ccg ccc 51
Met Ala Asp Glu Glu Lys Leu Pro Pro
1 5

ggc tgg gag aag cgc atg agc cgc agc tca ggc cga gtg tac tac ttc 99
Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg Val Tyr Tyr Phe
10 15 20 25

aac cac atc act aac gcc agc cag tgg gag cgg ccc agc ggc aac agc 147
Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro Ser Gly Asn Ser
30 35 40

agc agt ggt ggc aaa aac ggg cag ggg gag cct gcc agg gtc cgc tgc 195
Ser Ser Gly Gly Lys Asn Gly Gln Gly Glu Pro Ala Arg Val Arg Cys
45 50 55

tcg cac ctg ctg gtg aag cac agc cag tca cgg cgg ccc tcg tcc tgg 243
Ser His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp
60 65 70

cgg cag gag aag atc acc cgg acc aag gag gag gcc ctg gag ctg atc 291
Arg Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile

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     75                  80                  85

aac ggc tac atc cag aag atc aag tcg gga gag gag gac ttt gag tct      339
Asn Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser
 90                  95                 100                 105

ctg gcc tca cag ttc agc gac tgc agc tca gcc aag gcc agg gga gac      387
Leu Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp
                110                 115                 120

ctg ggt gcc ttc agc aga ggt cag atg cag aag cca ttt gaa gac gcc      435
Leu Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala
            125                 130                 135

tcg ttt gcg ctg cgg acg ggg gag atg agc ggg ccc gtg ttc acg gat      483
Ser Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp
        140                 145                 150

tcc ggc atc cac atc atc ctc cgc act gag tgagggtggg gagcccaggc        533
Ser Gly Ile His Ile Ile Leu Arg Thr Glu
    155                 160

ctggcctcgg ggcagggcag ggcggctagg ccggccagct ccccccttgcc cgccagccag   593
tggccgaacc ccccactccc tgccaccgtc acacagtatt tattgttccc acaatggctg    653
ggaggggggcc cttccagatt gggggccctg gggtccccac tccctgtcca tccccagttg   713
gggctgcgac cgccagattc tcccttaagg aattgacttc agcaggggtg ggaggctccc    773
agacccaggg cagtgtggtg ggaggggtgt tccaaagaga aggcctggtc agcagagccg    833
ccccgtgtcc ccccaggtgc tggaggcaga ctcgagggcc gaattgtttc tagttaggcc    893
acgctcctct gttcagtcgc aaaggtgaac actcatgcgg cagccatggg ccctctgagc    953
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a                                                                    1014
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<210> 2
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<212> PRT
<213> Homo sapiens

<400> 2

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Met Ala Asp Glu Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser
 1               5                  10                  15
Arg Ser Ser Gly Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser
            20                  25                  30
Gln Trp Glu Arg Pro Ser Gly Asn Ser Ser Ser Gly Gly Lys Asn Gly
        35                  40                  45
Gln Gly Glu Pro Ala Arg Val Arg Cys Ser His Leu Leu Val Lys His
    50                  55                  60
Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg Gln Glu Lys Ile Thr Arg
65                  70                  75                  80
Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn Gly Tyr Ile Gln Lys Ile
                85                  90                  95
Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu Ala Ser Gln Phe Ser Asp
            100                 105                 110
Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu Gly Ala Phe Ser Arg Gly
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```
        115                 120                 125
Gln Met Gln Lys Pro Phe Glu Asp Ala Ser Phe Ala Leu Arg Thr Gly
    130                 135                 140
Glu Met Ser Gly Pro Val Phe Thr Asp Ser Gly Ile His Ile Ile Leu
145                 150                 155                 160
Arg Thr Glu
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<210> 3
<211> 31
<212> DNA
<213> Homo sapiens

<400> 3
gcgcctgcag tatctataya tggaataytg t 31

<210> 4
<211> 31
<212> DNA
<213> Homo sapiens

<400> 4
gcgcggatcc rggtttcaga ggktyraasa g 31

<210> 5
<211> 30
<212> DNA
<213> Homo sapiens

<400> 5
gcgcgtacca agwccacygt ayattattcc 30

<210> 6
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 6
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 1               5                  10
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<210> 7
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 7
Met Ala Ser Tyr Pro Tyr Asp Val Pro Asp Tyr Ala Ser Pro Glu Phe
 1   5   10   15
Leu Val Asp Pro Pro Gly Ser Lys Asn Ser Ile Ala Arg Gly Lys Met
            20   25   30

<210> 8
<211> 39
<212> PRT
<213> Homo sapiens

<400> 8
Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly
 1   5   10   15
Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg
            20   25   30
Pro Ser Gly Asn Ser Ser Ser
        35

<210> 9
<211> 39
<212> PRT
<213> Yeast ESS1

<400> 9
Thr Gly Leu Pro Thr Pro Trp Thr Val Arg Tyr Ser Lys Ser Lys Lys
 1   5   10   15
Arg Glu Tyr Phe Phe Asn Pro Glu Thr Lys His Ser Gln Trp Glu Glu
            20   25   30
Pro Glu Gly Thr Asn Lys Asp
        35

<210> 10
<211> 38
<212> PRT
<213> Homo sapiens

<400> 10
Val Pro Leu Pro Ala Gly Trp Glu Met Ala Lys Thr Ser Ser Gly Gln
 1   5   10   15
Arg Tyr Phe Leu Asn His Ile Asp Gln Thr Thr Thr Trp Gln Asp Pro
            20   25   30
Arg Lys Ala Met Leu Ser
        35

<210> 11
<211> 38
<212> PRT
<213> Mus musculus

<400> 11
Ser Pro Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Val Leu Gly Arg
 1   5   10   15
Thr Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro
            20   25   30
Ser Pro Asp Asp Asp Leu
        35

<210> 12
<211> 38
<212> PRT
<213> Yeast RSPS

<400> 12
Gly Arg Leu Pro Pro Gly Trp Glu Arg Arg Thr Asp Asn Phe Gly Arg
 1   5   10   15
Thr Tyr Tyr Val Asp His Asn Thr Arg Thr Thr Thr Trp Lys Arg Pro
            20   25   30
Thr Leu Asp Gln Thr Glu
        35

<210> 13
<211> 38
<212> PRT
<213> Homo sapiens

<400> 13
Thr Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro Asn Lys Val
 1   5   10   15
Pro Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp Asp His Pro
            20   25   30
Lys Met Thr Glu Leu Tyr
        35

<210> 14
<211> 37
<212> PRT
<213> Rattus rattus

<400> 14
Ser Asp Leu Pro Ala Gly Trp Met Arg Val Gln Asp Thr Ser Gly Thr
 1   5   10   15
Tyr Tyr Trp His Ile Pro Thr Gly Thr Thr Gln Trp Glu Pro Pro Gly
            20   25   30
Arg Ala Ser Pro Ser
        35

<210> 15

<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus sequence

<400> 15
Leu Pro Gly Trp Glu Gly Tyr Tyr Asn His Thr Thr Trp Pro
 1   5   10

<210> 16
<211> 105
<212> PRT
<213> Homo sapiens

<400> 16
His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg
 1   5   10   15
Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn
            20   25   30
Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu
        35   40   45
Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu
    50   55   60
Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala Ser
65   70   75   80
Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp Ser
                85   90   95
Gly Ile His Ile Ile Leu Arg Thr Glu
            100   105

<210> 17
<211> 107
<212> PRT
<213> Yeast ESS1

<400> 17
His Ile Leu Ile Lys His Lys Asp Ser Arg Arg Pro Ala Ser His Arg
 1   5   10   15
Ser Glu Asn Ile Thr Ile Ser Lys Gln Asp Ala Thr Asp Glu Leu Lys
            20   25   30
Thr Leu Ile Thr Arg Leu Asp Asp Asp Ser Lys Thr Asn Ser Phe Glu
        35   40   45
Ala Leu Ala Lys Glu Arg Ser Asp Cys Ser Ser Tyr Lys Arg Gly Gly
    50   55   60
Asp Leu Gly Trp Phe Gly Arg Gly Glu Met Gln Pro Ser Phe Glu Asp
65   70   75   80
Ala Ala Phe Gln Leu Lys Val Gly Glu Val Ser Asp Ile Val Glu Ser
                85   90   95
Gly Ser Gly Val His Val Ile Lys Arg Val Gly

100 105

<210> 18
<211> 83
<212> PRT
<213> E. coli

<400> 18
His Ile Leu Val Lys Glu Glu Lys Leu Ala Leu Asp Leu Leu Glu Gln
1 5 10 15
Ile Lys Asn Gly Ala Asp Phe Gly Lys Leu Ala Lys Lys His Ser Ile
20 25 30
Cys Pro Ser Gly Lys Arg Gly Gly Asp Leu Gly Glu Phe Arg Gln Gly
35 40 45
Gln Met Val Pro Ala Phe Asp Lys Val Val Phe Ser Cys Pro Val Leu
50 55 60
Glu Pro Thr Gly Pro Leu His Thr Gln Phe Gly Tyr His Ile Ile Lys
65 70 75 80
Val Leu Tyr

<210> 19
<211> 84
<212> PRT
<213> B.subtilis

<400> 19
His Ile Leu Val Ala Asp Lys Lys Thr Ala Glu Glu Val Glu Lys Lys
1 5 10 15
Leu Lys Lys Gly Glu Lys Phe Glu Asp Leu Ala Lys Glu Tyr Ser Thr
20 25 30
Asp Ser Ser Ala Ser Lys Gly Gly Asp Leu Gly Trp Phe Ala Lys Glu
35 40 45
Gly Gln Met Asp Glu Thr Phe Ser Lys Ala Ala Phe Lys Leu Lys Thr
50 55 60
Gly Glu Val Ser Asp Pro Val Lys Thr Gln Tyr Gly Tyr His Ile Ile
65 70 75 80
Lys Lys Thr Glu

<210> 20
<211> 91
<212> PRT
<213> C. jejuni

<400> 20
His Ile Leu Val Ala Thr Glu Lys Glu Ala Lys Asp Ile Ile Asn Glu
1 5 10 15
Leu Lys Gly Leu Lys Gly Lys Glu Leu Asp Ala Lys Phe Ser Glu Leu
20 25 30
Ala Lys Glu Lys Ser Ile Asp Pro Gly Ser Lys Asn Gln Gly Gly Glu

```
        35                  40                  45
Leu Gly Trp Phe Asp Gln Ser Thr Met Val Lys Pro Phe Thr Asp Ala
    50                  55                  60
Ala Phe Ala Leu Lys Asn Gly Thr Ile Thr Thr Thr Pro Val Lys Thr
65                  70                  75                  80
Asn Phe Gly Tyr His Val Ile Leu Lys Glu Asn
                85                  90
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<210> 21
<211> 67
<212> PRT
<213> A. thaliana

<400> 21

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Ile Val Ser Lys Ala Asn Phe Glu Glu Val Ala Thr Arg Val Ser Asp
 1               5                  10                  15
Cys Ser Ser Ala Lys Arg Gly Gly Asp Leu Gly Ser Phe Gly Arg Gly
            20                  25                  30
Gln Met Gln Lys Pro Phe Glu Glu Ala Thr Tyr Ala Leu Lys Val Gly
        35                  40                  45
Asp Ile Ser Asp Ile Val Asp Thr Asp Ser Gly Val His Ile Ile Lys
    50                  55                  60
Arg Thr Glu
65
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<210> 22
<211> 45
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus sequence

<400> 22

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His Ile Leu Val Glu Lys Phe Glu Leu Ala Lys Ser Cys Ser Ser Lys
 1               5                  10                  15
Gly Gly Asp Leu Gly Phe Arg Gly Gln Met Phe Asp Ala Ala Phe Leu
            20                  25                  30
Lys Gly Glu Ser Pro Val Thr Gly Tyr His Ile Ile Lys
        35                  40                  45
```